

## **Attachment #16**

# Hazardous Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
<b>Diesel Storage</b>				
EG-701 Diesel Fuel Tank & Piping	Y or N			
EG-702 Diesel Fuel Tank & Piping	Y or N			
Buckets under P-703A&B Pumps Empty	Y or N			
Oil Tote Containment Drain Closed	Y or N			
<b>Boilers</b>	Yes or No	If Yes, indicate tag number of location (if available)	*Boilers #1 & #2, Describe evidence of Potential fugitive emissions (cracks, open doors)	Location, corrective action, comments, green tag number * If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or N			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or N			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or N			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or N			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or N			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or N			

P-634B pumps or associated piping and valves within dike area?				
Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or N			
Is there tank corrosion on VT-621 or VT-622?	Y or N			
Is there unusual venting from VT-621 or VT-622?	Y or N			
Is vegetation growing on VT-621 or 622?	Y or N			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or N			
<b>Boilers</b>	<i>Yes or No</i>	<i>If No, indicate tag number of location (if available)</i>	<i>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</i>	<i>Location, corrective action, comments, green tag number</i>
Is paint condition ok on VT-621 and VT-622	Y or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	Y or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	Y or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	Y or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	Y or *N			
Is VT-622 dike drain valve closed and locked?	Y or N			

6am-6pm Operator Signature T. W. J.  
Date 11/15/09

6pm-6am Operator Signature Doreen Williamson

Additional Comments or Notes:

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# Hazardous Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
Diesel Storage				
EG-701 Diesel Fuel Tank & Piping	Y or <input checked="" type="radio"/> N			
EG-702 Diesel Fuel Tank & Piping	Y or <input checked="" type="radio"/> N			
Buckets under P-703A&B Pumps Empty	<input checked="" type="radio"/> Y or N			
Oil Tote Containment Drain Closed	<input checked="" type="radio"/> Y or N			
Boilers	Yes or No	If Yes, indicate tag number of location (if available)	*Boilers #1 & #2, Describe evidence of Potential fugitive emissions (cracks, open doors)	Location, corrective action, comments, green tag number * If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or <input checked="" type="radio"/> N			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or <input checked="" type="radio"/> N			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or <input checked="" type="radio"/> N			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or <input checked="" type="radio"/> N			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or <input checked="" type="radio"/> N			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or <input checked="" type="radio"/> N			

P-634B pumps or associated piping and valves within dike area?				
Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or N			
Is there tank corrosion on VT-621 or VT-622?	Y or N			
Is there unusual venting from VT-621 or VT-622?	Y or N			
Is vegetation growing on VT-621 or 622?	Y or N			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or N			
Boilers	Yes or No	<i>If No, indicate tag number of location (if available)</i>	<i>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</i>	Location, corrective action, comments, green tag number
Is paint condition ok on VT-621 and VT-622	Y or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	Y or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	Y or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	Y or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	Y or *N			
Is VT-622 dike drain valve closed and locked?	Y or N			

6am-6pm Operator Signature

Date 11-23-09

6pm-6am Operator Signature

Additional Comments or Notes:

# Hazardous Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
<b>Diesel Storage</b>				
EG-701 Diesel Fuel Tank & Piping	Y or N			
EG-702 Diesel Fuel Tank & Piping	Y or N			
Buckets under P-703A&B Pumps Empty	Y or N			
Oil Tote Containment Drain Closed	Y or N			
<b>Boilers</b>	Yes or No	If Yes, indicate tag number of location (if available)	*Boilers #1 & #2, Describe evidence of Potential fugitive emissions (cracks, open doors)	Location, corrective action, comments, green tag number * If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or N			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or N			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or N			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or N			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or N			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or N			

Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or N			
Is there tank corrosion on VT-621 or VT-622?	Y or N			
Is there unusual venting from VT-621 or VT-622?	Y or N			
Is vegetation growing on VT-621 or 622?	Y or N			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or N			
Boilers	Yes or No	If No, indicate tag number of location (if available)	*Boilers #1 & #2, Describe evidence of Potential fugitive emissions (cracks, open doors)	Location, corrective action, comments, green tag number
Is paint condition ok on VT-621 and VT-622	Y or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	Y or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	Y or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	Y or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	Y or *N			
Is VT-622 dike drain valve closed and locked?	Y or N			

6am-6pm Operator Signature  
Date

*TUN*

6pm-6am Operator Signature

*Dorcas Williams*

Additional Comments or Notes:

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# Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
<b>Diesel Storage</b>				
EG-701 Diesel Fuel Tank & Piping	Y or <b>N</b>			
EG-702 Diesel Fuel Tank & Piping	Y or <b>N</b>			
Buckets under P-703A&B Pumps Empty	<b>Y</b> or N			
Oil Tote Containment Drain Closed	<b>Y</b> or N			
<b>Boilers</b>	<b>Yes or No</b>	<i>If Yes, indicate tag number of location (if available)</i>	<i>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</i>	Location, corrective action, comments, green tag number <b>* If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.</b>
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or <b>N</b>			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or <b>N</b>			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or <b>N</b>			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or <b>N</b>			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or <b>N</b>			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or <b>N</b>			



Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or N			
Is there tank corrosion on VT-621 or VT-622?	Y or N			
Is there unusual venting from VT-621 or VT-622?	Y or N			
Is vegetation growing on VT-621 or 622?	Y or N			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or N			
<b>Boilers</b>	<b>Yes or No</b>	<b>If No, indicate tag number of location (if available)</b>	<b>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</b>	<b>Location, corrective action, comments, green tag number</b>
Is paint condition ok on VT-621 and VT-622	Y or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	Y or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	Y or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	Y or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	Y or *N			
Is VT-622 dike drain valve closed and locked?	Y or N			

6am-6pm Operator Signature

Date 12/21/09

6pm-6am Operator Signature

Additional Comments or Notes:

# Hazardous Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
<b>Diesel Storage</b>				
EG-701 Diesel Fuel Tank & Piping	Y or N			
EG-702 Diesel Fuel Tank & Piping	Y or N			
Buckets under P-703A&B Pumps Empty	Y or N			
Oil Tote Containment Drain Closed	Y or N			
<b>Boilers</b>	<b>Yes or No</b>	<b>If Yes, indicate tag number of location (if available)</b>	<b>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</b>	<b>Location, corrective action, comments, green tag number</b> <b>* If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.</b>
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or N			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or N			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or N			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or N			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or N			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or N			

Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or N			
Is there tank corrosion on VT-621 or VT-622?	Y or N			
Is there unusual venting from VT-621 or VT-622?	Y or N			
Is vegetation growing on VT-621 or 622?	Y or N			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or N			
<b>Boilers</b>	<b>Yes or No</b>	<b>If No, indicate tag number of location (if available)</b>	<b>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</b>	<b>Location, corrective action, comments, green tag number</b>
Is paint condition ok on VT-621 and VT-622	Y or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	Y or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	Y or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	Y or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	Y or *N			
Is VT-622 dike drain valve closed and locked?	Y or N			

6am-6pm Operator Signature

Date

1/13/10

6pm-6am Operator Signature

Additional Comments or Notes:

# Hazardous Waste Piping Systems, Diesel Storage Tank and Boiler Emissions Daily Inspection Report

Section of System	Visible Leaks or Spills – Yes or No	If Yes, indicate tag number of location		Location, corrective action, comments, green tag number
<b>Diesel Storage</b>				
EG-701 Diesel Fuel Tank & Piping	Y or <u>N</u>			
EG-702 Diesel Fuel Tank & Piping	Y or <u>N</u>			
Buckets under P-703A&B Pumps Empty	<u>Y</u> or N			
Oil Tote Containment Drain Closed	<u>Y</u> or N			
<b>Boilers</b>	Yes or No	If Yes, indicate tag number of location (if available)	*Boilers #1 & #2, Describe evidence of Potential fugitive emissions (cracks, open doors)	Location, corrective action, comments, green tag number * If a large crack or opening is observed, follow procedure to switch over from residue to natural gas firing.
Boilers #1 & #2, any cracks, scorched hot spots, missing insulation or broken coating on exterior insulation on all sides of boilers up to the 5 <sup>th</sup> floor.	*Y or <u>N</u>			
Any other locations of cracks, seal loss or instrumentation penetration sealing that would allow fugitive emissions of combustion gases from Boiler #1 or #2.	*Y or <u>N</u>			
Any missing caulk, sealant or cracks on wall penetration points on boiler #1 or #2.	*Y or <u>N</u>			
Residue Supply Piping from VT-621 and VT-622 tanks to Boilers #1 and #2 have any visible leaks	Y or <u>N</u>			
Residue Return Piping from Boilers #1 & #2 to VT-621 & VT-622 Residue Tanks have any visible leaks.	Y or <u>N</u>			
Visible leaks or spills on VT-621 or VT-622 residue tanks or in the piping between VT-621 and VT-622 and the P-634A and	Y or <u>N</u>			

P-634B pumps or associated piping and valves within dike area?				
Visible leaks on P-634C residue transfer pump, or in the transfer piping between the P-634A pump and VT-621 & VT-622 tanks?	Y or <u>N</u>			
Is there tank corrosion on VT-621 or VT-622?	Y or <u>N</u>			
Is there unusual venting from VT-621 or VT-622?	Y or <u>N</u>			
Is vegetation growing on VT-621 or 622?	Y or <u>N</u>			
Are there any new cracks in VT-621 or VT-622 dikes?	Y or <u>N</u>			
Boilers	Yes or No	<i>If No, indicate tag number of location (if available)</i>	<i>*Boilers #1 &amp; #2, Describe evidence of Potential fugitive emissions (cracks, open doors)</i>	Location, corrective action, comments, green tag number
Is paint condition ok on VT-621 and VT-622	<u>Y</u> or N			
Boilers #1 & #2, are oil barrel covers in place when a burner is Out of Service?	<u>Y</u> or N			
Boilers #1 & #2, are all (16) manways and (8) hand ports closed?	<u>Y</u> or *N			
Boilers #1 & #2, are the camera and Temperature ports closed?	<u>Y</u> or *N			
Boilers #1 & #2, caulk around superheater outlet piping in good condition	<u>Y</u> or *N			
Is VT-622 dike drain valve closed and locked?	<u>Y</u> or N			

6am-6pm Operator Signature

Date 11/15/10

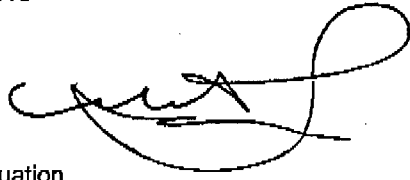
6pm-6am Operator Signature

Additional Comments or Notes:

## **Attachment #17**

## Memorandum

DATE: November 22, 2010  
TO: To File  
FROM: Mark A Sweitzer  
RE: Subpart CC Evaluation  
CC: Paul Persing



### Summary

This evaluation was originally completed and documented in a memorandum, dated March 11, 1996 (from Paul Persing to Environmental File). Because of updates and re-wording to 40 CFR 265, this memorandum-to-file reflects certain relevant aspects of the current regulatory text.

The Subpart CC Air Emission Standards apply to tanks, surface impoundments, and containers that manage hazardous waste. The following is an evaluation of the impacts of the regulations on Sunoco Frankford's present hazardous waste tanks. On-site above-ground storage tanks currently holding hazardous waste include VT-130, VT-132, VT-245, VT-601, VT-602, VT-621 and VT-622.

### Tanks

Fixed-roof tanks may manage and store hazardous waste presuming the following conditions are met:

265.1085 (b)(1)(i)(A): For a tank design capacity equal to or greater than 151 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 5.2 kPa (0.75416 psi).

*This regulation applies to VT-621 and VT-622, only. These two tanks have a total capacity of approximately 70,500 gallons, each. 151m<sup>3</sup> converts to approximately 39,888 gallons. The vapor pressure of phenol residue in VT-621 and VT-622 is 0.5471 psia at 212 degrees F. These two tanks are connected and contain the same material. The use of 212 degrees F is considered to be the maximum operating temperature of waste in these vessels. The above-noted vapor pressure was calculated utilizing up-to-date waste constituents. The percentage of individual chemicals in the waste is based on most recent information.*

265.1085 (b)(1)(i)(B): For a tank design capacity equal to or greater than 75 m<sup>3</sup>, but less than 151 m<sup>3</sup> the maximum organic vapor pressure limit for the tank is 27.6 kPa (4.00 psi).

*Not applicable. No on-site hazardous waste tanks are between 75 m<sup>3</sup> (~20,000 gallons) and 151 m<sup>3</sup> (~40,000 gallons)*

265.1085 (b)(1)(i)(C): For a tank design capacity <75 m<sup>3</sup>, the maximum organic vapor pressure limit for the tank is 76.6 kPa (11.1 psi).

*This regulation applies to VT-130 (~11,750 gallon capacity), VT-132 (~11,750 gallon capacity), VT-245 (~11,750 gallon capacity), VT-601 (~15,400 gallon capacity) and VT-602 (~11,300 gallon capacity). The predicted vapor pressure of hazardous waste in the tanks is as follows: VT-130 = 0.7516 psi @ 212 deg F; VT-132 = 0.7512 psi @ 212 deg F; VT-245 = 3.2228 psi @ 212 deg F; VT-601 = 2.9805 psi @ 212 deg F; and VT-602 = 2.9805 psi @ 212 deg F.*

265.1085 (b)(1)(ii): The hazardous waste in the tank is not heated by the owner or operator to a temperature that is greater than the temperature at which the maximum vapor pressure of the hazardous waste is determined for the purpose of complying with (b)(1)(i).

*The waste in the tanks may be heated to prevent it from freezing and to allow it to flow through the system. As part of the effort to update this environmental compliance memo, vapor pressure values were calculated at maximum tank temperatures (212 F). Those vapor pressures are noted above. All vapor pressures comply with (b)(1)(i).*

265.1085 (b)(1)(iii): The hazardous waste in the tank is not treated by the owner or operator using a waste stabilization process.

*No hazardous waste treatment is undertaken in any of the on-site hazardous waste tanks.*

Since the above conditions are met, air emissions may be managed using "Tank Level 1" controls. These controls include the following:

265.1085 (c)(1): Determine the maximum organic vapor pressure for a hazardous waste to be managed in the tank before the first time the hazardous waste is placed in the tank. Thereafter, a new determination will be performed whenever the hazardous waste managed in the tank could potentially cause the maximum organic vapor pressure to increase.

*Data utilized to develop the vapor pressures noted in this memo is consider up-to-date data on tank contents.*

265.1085 (c)(2): The tank shall have a fixed roof designed to form a continuous barrier over the entire surface area of the hazardous waste.

*All these tanks have fixed roofs. The condition of the roofs are inspected and documented, per required PaDEP and/or USEPA inspection schedules.*

265.1085 (c)(3): Whenever a hazardous waste is in the tank, the fixed roof shall be installed with each closure device secured in the closed position. The fixed roof shall be visually inspected by the owner or operator to check for defects. Any defects must be repaired; first attempt within five days and final repairs completed within 45 days unless repairs require emptying the tank or temporary removal from service. An initial in-service inspection is required as well as annual inspections. Records of inspections and repairs must be maintained.

*Detailed tank inspections are performed and documented, per required PaDEP and/or USEPA inspection schedules. Additional visual inspections are performed, and documented, weekly.*

The on-site waste LNAPL storage tanks are exempt from this regulation as per 265.1080 (b) (5) since the tanks are used solely for the storage of Hazardous Waste as a result of a RCRA remedial action.

#### Containers

Hazardous waste not managed in the above-described above-ground storage tanks is stored in closed drums of greater than 0.1 m<sup>3</sup> (26.4 gal) but less than .46 m<sup>3</sup> (121.5 gal) in volume, or in roll-off containers. All roll-off containers utilized at the facility have a design capacity greater than 0.46 m<sup>3</sup>; however, no roll-off containers are in light material service. For these reasons, all drums and roll-off containers are required to adhere to 265.1087 (c)(1)(i) and (ii). Specifically, they must follow Level 1 emission control standards.

Per the standards, all Sunoco-utilized on-site storage drums and roll-off containers are managed as follows:

- Containers meet USDOT requirements.



- All containers are fitted with lids or covered that form a continuous barrier over the container opening. The lid or cover can be secured so there are no visible holes, gaps, or other open spaces into the interior of the container.
- All containers are kept closed except during times when material is being added.
- All containers are inspected (at a minimum) weekly, to ensure compliance
- Defects in covers must be promptly repaired. First attempt at repair must be within 24 hours and must be completed within five days.

**EMISSIONS FROM FIXED ROOF TANKS AT ELEVATED TEMPERATURES**  
**(Subpart CC Regulated Hazardous Waste Storage Tanks)**

Tank Identification VT-245  
 Temperature of Contents 212 F  
 Tank Diameter 10 Feet  
 Vapor Space Height 10 Feet  
 Tank Capacity 11750 Gallons

Liquid Components	Weight Percentage	Molecular wt.	Mole Fraction Calculations	vapor press @ 212 F psia	partial pressure @ 212F and stated mole fraction psia	
Phenol	9.56	94.108	0.10158541	0.118	0.8248	0.0973
Cumene	77.03	120.196	0.64086991	0.744	2.9805	2.2176
Acetone	0.62	58.081	0.01087475	0.012	53.8006	0.6668
AMS	12.68	118.17	0.10730304	0.125	1.9320	0.2407
Acetophenone	0.11	120.14	0.0009156	0.001	0.5178	0.0006
	100		0.86134871			total pressure,psia, @ 212F and stated mole fraction
						3.2228

Tank Identification VT-130  
 Temperature of Contents 212 F  
 Tank Diameter 10 Feet  
 Vapor Space Height 10 Feet  
 Tank Capacity 11750 Gallons

Liquid Components	Weight Percentage	Molecular wt.	Mole Fraction Calculations	vapor press @ 212 F psia	partial pressure @ 212F and stated mole fraction psia	
Phenol	25	94.108	0.26565223	0.297	0.8248	0.2453
Para-alpha Cumylphenol	40	120.196	0.33278978	0.373	0.0014	0.0005
AMS	25	118.17	0.21155982	0.237	1.9320	0.4576
Acetophenone	10	120.14	0.08323622	0.093	0.5178	0.0483
			0.89323785			total pressure,psia, @ 212F and stated mole fraction
						0.7516

Tank Identification VT-132  
 Temperature of Contents 212 F  
 Tank Diameter 10 Feet  
 Vapor Space Height 10 Feet  
 Tank Capacity 11750 Gallons

Liquid Components	Weight Percentage	Molecular wt.	Mole Fraction Calculations	vapor press @ 212 F	partial pressure @ 212F and stated mole fraction psia	
Phenol	25	94.108	0.26565223	0.297	0.8248	0.2453
Para-alpha Cumylphenol	40	120.196	0.33278978	0.373	0.0014	0.0005
AMS	25	118.17	0.21155982	0.237	1.9320	0.4576
Acetophenone	10	120.14	0.08323622	0.093	0.5178	0.0483
			0.89323785			0.7516
						total pressure,psia, @ 212F and stated mole fraction

Tank Identification VT-601  
 Temperature of Contents 120 F

212 F (Calculate VP at both temperatures)

Tank Diameter 9.5 Feet  
Vapor Space Height 2 Feet  
Tank Capacity 15362 Gallons

Liquid Components	Weight Percentage	Molecular wt.	Mole Fraction Calculations	120 F		212 F	
				psia		psia	
Cumene	100	120.196	0.89197444	1	0.3435	2.9805	psia

Tank Identification VT-602  
Temperature of Contents 120 F  
Tank Diameter 10 Feet  
Vapor Space Height 10 Feet  
Tank Capacity 11314 Gallons

212 F (Calculate VP at both temperatures)

Liquid Components	Weight Percentage	Molecular wt.	Mole Fraction Calculations	120 F		212 F	
				psia		psia	
Cumene	100	120.196	1	0.3435		2.9805	psia

Tank Identification VT-621  
Temperature of Contents 212 F  
Tank Diameter 20 Feet  
Vapor Space Height 15 Feet  
Tank Capacity 70500 Gallons

Liquid Components	Weight Percentage	Molecular wt.		Mole Fraction Calculations	vapor press @ 212 F psia	partial pressure @ 212F and stated mole fraction	
						psia	
Phenol	7	94.108	0.07438262	0.08738883	0.8248	0.0721	
Para-alpha Cumylphenol	53	120.196	0.48254518	0.5669208	0.0014	0.0008	
AMS	21	118.17	0.17771008	0.20878364	1.9320	0.4034	
Acetophenone	14	120.14	0.11653071	0.13690674	0.5178	0.0709	
			0.85116859			0.5471	total pressure, psia, @ 212F and stated mole fraction

Tank Identification VT-622  
Temperature of Contents 212 F  
Tank Diameter 20 Feet  
Vapor Space Height 15 Feet  
Tank Capacity 70500 Gallons

Liquid Components	Weight Percentage	Molecular wt.		Mole Fraction Calculations	vapor press @ 212 F psia	partial pressure @ 212F and stated mole fraction	
						psia	
Phenol	7	94.108	0.07438262	0.08738883	0.8247738	0.0721	
Para-alpha Cumylphenol	53	120.196	0.48254518	0.5669208	0.0013846	0.0008	
AMS	21	118.17	0.17771008	0.20878364	1.9319828	0.4034	
Acetophenone	14	120.14	0.11653071	0.13690674	0.5178034	0.0709	
			0.85116859			0.5471	total pressure, psia, @ 212F and stated mole fraction

= Based information included on the MSDS sheet. "Phenol Heavies" were combined with Cumylphenol for this as

## **Attachment #18**

[illegible]



# VT-132 Hazardous Waste Tank Log Sheet

Date:	Initials:	Beginning Level	Ending Level	Disposition	Verification	Comments
1/1/99	FAR	10'0"	0'9"	To VT-621	Lost Pump Suction	This is an Example
1/28/96	RK	0-0	0-0	—	Yes	
2-9-07	RK	0-0	0-0	—	Yes	
4-5-07	RK	00	00	—	Yes	
6-1-07	RK	00	00	—	Yes	
8-14-07	RK	011	00	—	Yes	
9-27-07	RK	011	00	—	Yes	
10-10-07	RK	07	00	—	Yes	
12-3-07	RK	07	00	—	Yes	
2-15-08	SK	0-7	0-7	—	YES Pumped Pump	
6/13/08	PMP	11'	5'			Removed Liquid - Clean Harbor will Remove Hecal
8/23/08	PMP	<del>11'</del>	<del>5'</del>			O.O.S. for Sludge Removal
10/18/08	RK	—	—	—	—	O.O.S. for Sludge Removal
3/12/09	mas	5' 11"	5' 11"			O.O.S. for Sludge Removal
2/14/10	JP	25	25		Vercc Brake	TANK MT
5-4-10	SK	25	25		Vercc Brake	TANK MT



Form #527-132  
03/11/99

N:\Phenol\HZTLOG



# VT-245 Hazardous Waste Tank Log Sheet

Date:	Initials:	Beginning Level	Ending Level	Disposition	Verification	Comments
1/1/99	FAR	5'6"	4'6"	To VT-130	Lost Pump Suction	This is an Example
7/23/09	MAF	12'1"	0	CLEAN HARBORS - VACTRUCK PUMP OUT.		
10-7-09	DC	12'-8"	0'-11"	CLEAN HARBOR - LOST SUCTION		
11-19-09	MAF			PUMPED OUT OF TRUCK - DID NOT EMPTY.		
12-30-09	JF	3'6"	0'-5"	CLEAN HARBORS - VACTRUCK PUMP OUT		
2-3-09	MAF		1'4"	CLEAN HARBORS PARTIAL PUMPOUT.		
12-10-09	JF	12	0.11	CLEAN Harbor Pump out		
2-3-10	JF	12.4	0.11	CLEAN Harbor Pump out		
3-30-10	NM	12.8	0.10	CLEAN HARBORS 0-10		
5-7-10	MAF	11.8	1.8	CLEAN HARBORS 1.8		PUMP OUT
6-22-10	MAF	13'8"	0'11"	CLEAN HARBORS 0'11"		PUMP OUT.
7-7-10	DC	17'-10"	3'-8"	CLEAN HARBOR		SUCKED OUT
7-8-10	DC	3'-8"	0'-9"	CLEAN HARBOR		LOST SUCTION
9-1-10	NJM	13'-2"	1'-5"	CLEAN HARBOR - Partial		Pumpout





# VT-602 Hazardous Waste Tank Log Sheet

Date:	Initials:	Beginning Level	Ending Level	Disposition	Verification	Comments
1/1/99	FAR	10'6"	0'9"	To VT-621	Lost Pump Suction	This is an Example
1/31/09	TC	1-9	0-9	To VT621	11	
6-19-09	DC	1-9	0-0	To VT621	" + DOWATERED	
8-27-09	<del>TC</del>	2-0	0-6	TO VT621	" + DOWATERED	BACK TO VT-601
9-28-09	VO	8 0	0 0	TO VT622		
12/17/09	TC	0 9	0 9	EMPTY		
2-16-10	JK	1-10	1-10	"	"	
5-4-10	IT	1-10	1-10	MT	YES	
7-17-10	VO	1-10	1-10	MT	YES	

## **Attachment #19**

**Law Department**

**Sunoco, Inc.**  
1735 Market Street Ste LL  
Philadelphia PA 19103-7583

March 30, 2010

**VIA FEDERAL EXPRESS**

Pennsylvania Department of Environmental Protection  
Bureau of Waste Management  
Division of Hazardous Waste Management  
RCSOB - 14th Floor  
400 Market Street  
P.O. Box 8471  
Harrisburg, PA 17105-8471

Attention: Mr. Walt Harner,

**Re: Pennsylvania Financial Responsibility Documentation –  
Closure and Post-Closure:**

**Sunoco, Inc. (R&M) - Marcus Hook Refinery #PAD980550594;  
Sunoco, Inc. (R&M) - Philadelphia Refinery (Girard Point  
Processing Area) #PAD049791098;  
Atlantic Refining & Marketing Corp. (Owner)/Sunoco, Inc.  
(R&M) (Operator) - Philadelphia Refinery (Point Breeze  
Processing Area) #PAD002289700;  
Sunoco, Inc. (R&M) - Frankford Plant #PAD002312791**

Dear Sir or Madam:

Sunoco, Inc. (Sunoco) is submitting the following documents in connection with the hazardous waste financial responsibility requirements for closure and post-closure for the hazardous waste facilities at the above referenced facilities. The documents enclosed are as follows:

1. Annual Renewal of the Hazardous Waste Site Closure or Post-Closure Corporate Guarantee Bond;
2. Guaranty and Suretyship Agreement;

Department of Environmental Protection  
March 25, 2010  
Page 2

3. Letter of the Chief Financial Officer, which includes the financial test;
4. Report of Independent Auditors;
5. One (1) copy of the Sunoco, Inc. 2009 Annual Report and Form 10-K, which includes the 2009 Annual Report, Financial Statements and the Independent Auditors' Report on the Financial Statements.

If you have any questions or need anything further, please call me at (215) 977-6238.

Very truly yours,



Micheko L. Kahlon  
Senior Paralegal

MLK/  
Enclosures

cc: J. Wentzel (w/encls.)  
PaDEP, Southeast Regional Office

bcc: All w/enclosures

D. L. Martorano  
G. Navo  
P. M. Persing ✓  
K. Kowal  
S. A. Baker  
J. Freudenberg  
C. Barksdale

2510-FM-BWM0079A Rev. 3/2006



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF LAND RECYCLING AND WASTE MANAGEMENT

## HAZARDOUS WASTE SITE CLOSURE OR POST-CLOSURE CORPORATE GUARANTEE BOND

☐ Initial Application  
☒ Annual Renewal

Department of Environmental Protection  
Bureau of Waste Management  
Division of Hazardous Waste Management  
RCSOB - 14th Floor  
P.O. Box 8471  
Harrisburg, PA 17105-8471

Dear Sir or Madam:

I am the Chief Financial Officer of Sunoco, Inc., 1735 Market Street, Philadelphia, PA 19103-7583  
(Applicant Name and Address)

parent corporation of Sunoco, Inc. (R&M) and Atlantic Refining & Marketing Corp.,

Hereinafter referred to as "Applicant." This letter is in support of the use of the financial test to demonstrate financial responsibility for closure and/or post-closure care as specified in 25 Pa. Code Sections 265a.156(e). The Applicant identified previously is the owner or operator of the following facilities for which use of the corporate guarantee bond under 25 Pa. Code Section 265a.156(e) is being demonstrated.

NAME	ADDRESS	EPA I.D. NUMBER
1. <u>See Attachment A to Hazardous Waste Site Closure or Post-Closure Corporate Guarantee Bond</u>		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		

I hereby certify that the applicant in the last 36 calendar months preceding this application:

1. HAS NOT defaulted on the payment of preferred stock dividends, sinking fund installments, installment on indebtedness for borrowed money or payment of rentals under long-term leases.

(If the statement is HAS) Explain:

2510-FM-BWM0079A Rev. 3/2006

2. HAS honored and complied with all its obligations under all applicable self-insurance programs authorized by the statutes of the Commonwealth.

(If the statement is HAS NOT) Explain and specify the reason(s):

3. HAS honored its obligations under all applicable self-insurance and corporate guarantee programs implemented by any other state or the Environmental Protection Agency.

(If the statement is HAS NOT) Explain and specify the reason(s):

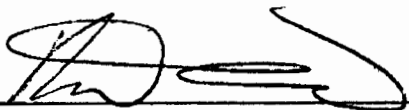
4. HAS NOT had commercial insurance cancelled for nonpayment of premiums or fraud or failure to maintain a reasonable risk management program required by a commercial insurance underwriter as a condition of maintaining or reviewing insurance coverage.

(If the statement is HAS) Explain. If for nonpayment of premiums, specify the reason(s) for nonpayment:

2510-FM-BWM0079A Rev. 3/2006

I certify the information that is contained in this letter and on any attachments to this letter is true and correct to the best of my knowledge and belief. Upon request by the Department, I agree to promptly provide an update of the information contained in this letter and any attachments hereto. I certify that I am legally authorized to sign, date and submit this information on behalf of the applicant.

SIGNATURE: \_\_\_\_\_

NAME: Brian P. MacDonaldTITLE: Senior Vice President and Chief Financial OfficerDATE: March 25, 2010



2510-FM-BWM0079A Rev. 3/2006

COMMONWEALTH  
OF PENNSYLVANIA

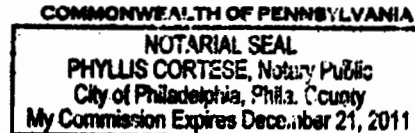
COUNTY OF PHILADELPHIA

:  
:  
:  
:  
: ss

On this, the 25th day of March, 2010, before me personally appeared Brian P. MacDonald who acknowledged himself to be the Senior Vice President and Chief Financial Officer of Sunoco, Inc., a Pennsylvania corporation, and that as such he being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the corporation by himself as Senior Vice President and Chief Financial Officer.

IN WITNESS WHEREOF, I hereunder set my hand and official seal

*Phyllis Cortese*  
\_\_\_\_\_  
Notary Public



My Commission Expires:

*December 21, 2011*

2510-FM-BWM0079A Rev. 3/2006

**ATTACHMENT 1****FINANCIAL TEST  
ALTERNATIVE 1**
☐ Initial Application  
☒ Annual Renewal

1. Amount of Annual Aggregate Closure and/or Post-Closure Bond to be Demonstrated: ..... \$ .....
2. Current Assets: ..... \$ .....
3. Current Liabilities: ..... \$ .....
4. Net Working Capital (Line 2 minus Line 3): ..... \$ .....
5. Tangible Net Worth: ..... \$ .....
- a. Total Net Worth: ..... \$ .....
- b. Applicant must meet two (2) of the following three (3) ratios
- |  | YES                      | NO                       |
|--|--------------------------|--------------------------|
| 1. Has a ratio of Total liabilities to Net worth less than 2.0   | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Has a ratio of the Sum of Net income plus depreciation, depletion, and amortization to Total Liabilities greater than 0.1 | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Has a ratio of current assets to current liabilities greater than 1.5   | <input type="checkbox"/> | <input type="checkbox"/> |
6. Percent of Assets Located in the United States Assets: ..... \$ .....
7. Total United States Assets: ..... \$ .....
- a. Total assets ..... \$ .....
- |  | YES                      | NO                       |
|--|--------------------------|--------------------------|
| 8. Is Line 5 at least \$10 million? .....        | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. Is Line 4 at least 6 times (X) Line 1? .....  | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. Is Line 5 at least 6 times (X) Line 1? ..... | <input type="checkbox"/> | <input type="checkbox"/> |
- (If less than 90% of assets are located in the United States - complete Line 11)*
11. Is Line 7 at least 6 times (X) Line 1? ..... ☐ YES ☐ NO
12. Owner or Operator is required to file Form 10K and Form 10Q with the Securities and Exchange Commission ..... ☐ YES ☐ NO
13. Amounts contained in Lines 2, 3, 4, 5, 6, and 7 are derived from owner or operator independently audited, year-end financial statements for the latest completed fiscal year ..... ☐ YES ☐ NO
14. Owner or Operator fiscal year ends on:  
 Month: \_\_\_\_\_ Day: \_\_\_\_\_ Year: \_\_\_\_\_

2510-FM-BWM0079A Rev. 3/2008

**ATTACHMENT 2****FINANCIAL TEST  
ALTERNATIVE 2**
☐ Initial Application  
☒ Annual Renewal

1. Amount of Annual Aggregate Closure and/or Post-Closure Bond to be Demonstrated: ..... \$ 19,713,514
2. Current Bond Rating, most recent issue: ..... \$ BBB-
  - (a) Name of Rating Service ..... \$ Standard & Poors
  - (b) Date of Bond Issuance ..... \$ March 31, 2009
  - (c) Date of Bond Maturity ..... \$ April 15, 2015
3. Tangible Net Worth: ..... \$ 2,842 Million
4. Percent of Assets Located in the United States ..... \$ 99%
5. Total United States Assets: ..... \$ 11,796 Million

- |   | YES | NO                       |
|---|-----|--------------------------|
| 6. Is Line 3 at least \$10 million? .....       | X   | <input type="checkbox"/> |
| 7. Is Line 3 at least 6 times (X) Line 1? ..... | X   | <input type="checkbox"/> |

*(If less than 90% of assets are located in the United States - complete Line 8)*

8. Is Line 5 at least 6 times (X) Line 1? ..... ☐ N/A ☐
9. Owner or Operator is required to file Form 10K and Form 10Q with the Securities and Exchange Commission ..... X ☐
10. Amounts contained in Lines 3, 4, and 5 are derived from owner or operator independently audited, year-end financial statements for the latest completed fiscal year ..... X ☐
11. Owner or Operator fiscal year ends on  
Month: December Day: 31st Year: 2009

**Attachment A****Hazardous Waste Site Closure  
or Post-Closure Corporate Guarantee Bond**

<b>Name (Owner or Operator)</b>			<b>Address</b>	<b>E.P.A. I.D. Number</b>
1.	Sunoco, Inc. (R&M) Philadelphia Refinery (Girard Point Processing Area)		3144 West Passyunk Avenue Philadelphia, PA 19145	PAD 049791098
2.	Atlantic Refining & Marketing Corp. (Permittee) Philadelphia Refinery (Point Breeze Processing Area)		3144 West Passyunk Avenue Philadelphia, PA 19145	PAD 002289700
3.	Sunoco, Inc. (R&M) Marcus Hook Refinery (Solid Waste Facility/ Container Storage Area)		P. O. Box 426 2nd and Green Streets Marcus Hook, PA 19061-0835	PAD 980550594
4.	Sunoco, Inc. (R&M) Marcus Hook Refinery (Middle Creek Conveyance System)		P. O. Box 426 2nd and Green Streets Marcus Hook, PA 19061-0835	PAD 980550594
5.	Sunoco, Inc. (R&M) Frankford Plant		Margaret and Bermuda Streets Philadelphia, PA 19137	PAD 002312791

2510-FM-BWM0079A Rev. 3/2008

**GUARANTY AND SURETYSHIP AGREEMENT**

**THIS AGREEMENT** ("Guaranty and Suretyship Agreement" or "Agreement") made this 25<sup>th</sup> day of March, 2010, by and between the COMMONWEALTH OF PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION ("DEP"), a Commonwealth executive agency with offices in the Rachel Carson State Office Building, 400 Market Street, P. O. Box 8471, Harrisburg, Pennsylvania 17105-8471 and Sunoco, Inc. ("Guarantor"), with its principal place of business at 1735 Market Street, Philadelphia, PA 19103-7583.

**WHEREAS**, on March 30, 2009, the Guarantor entered into a bond agreement, Permit Number (See Attachment A to Guaranty and Suretyship Agreement for Permit Numbers) ("Bond Agreement") with DEP as part of Guarantor's bond obligations under 25 Pa. Code Section 264a.153 and which requires Guarantor to secure its obligations under the Bond Agreement. The Bond Agreement is attached and incorporated herein; and

**WHEREAS**, Guarantor's legal obligation to pay claims is evidenced by the Bond Agreement in the amount of Nineteen Million Seven Hundred Thirteen Thousand Five Hundred Fourteen (\$19,713,514) Dollars and under 25 Pa. Code Section 265a.156, this Agreement secures an amount of Nineteen Million Seven Hundred Thirteen Thousand Five Hundred Fourteen (\$19,713,514) Dollars.

**NOW THEREFORE**, in consideration of the acceptance of the bond agreement and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the undersigned agree as follows:

Optional if replacing a different financial assurance with this Guaranty and Suretyship Agreement:

1. **Replacement.** This Agreement replaces/renews in its entirety that Corporate Guarantee Bond between Sunoco, Inc., parent corporation of Sunoco, Inc. (R&M) and Atlantic Refining & Marketing Corp. and DEP dated March 30, 2009.

2. **Guaranty.** The undersigned Guarantor irrevocably, unconditionally and absolutely guarantees to DEP and becomes surety for:

(a) The prompt payment of up to Nineteen Million Seven Hundred Thirteen Thousand Five Hundred Fourteen (\$19,713,514) Dollars due to DEP from the Guarantor under the terms of the Bond Agreement; and

(b) The prompt and complete compliance with and performance by the Guarantor of all representations, warranties, covenants, agreement and other obligations to DEP under the terms of the Bond Agreement (the payment, compliance and performance obligations hereinabove guaranteed by the undersigned Guarantor are hereinafter collectively referred to as the "Guaranteed Obligations").

3. **Term.** This Agreement shall remain in full force and effect until all of the Guaranteed Obligations are fully, finally and irrevocably paid, complied with and performed.

4. **Hold Harmless.** Guarantor shall fully pay, upon demand by DEP, any and all sums up to Nineteen Million Seven Hundred Thirteen Thousand Five Hundred Fourteen (\$19,713,514) Dollars arising from any default (after appropriate notice and cure periods as may be set forth therein) by the Guarantor or otherwise under the Bond Agreement.

5. **Guarantor Obligations.** In the event that any default occurs under the Bond Agreement (after appropriate notice and cure periods as may be set forth herein), the undersigned Guarantor shall pay, comply with and perform such of the Guaranteed Obligations as DEP shall direct, irrespective of whether the Guaranteed Obligations directed by DEP to be paid, complied with and performed by the undersigned Guarantor are those which give rise to the default.

6. DEP shall have the right to require the undersigned Guarantor to pay, comply with and perform the Guaranteed Obligations and shall have the right to proceed immediately against the undersigned Guarantor for such payment, compliance and performance without being required to make any demand upon or bring any proceeding or take any other action of any kind against the Guarantor, or any other person or entity in connection with the Bond Agreement as

2510-FM-BWM0079A Rev. 3/2008

a condition precedent to bringing an action upon this Agreement against the undersigned Guarantor. This Agreement shall be deemed an agreement of suretyship under the laws of the Commonwealth of Pennsylvania.

7. **Confession of Judgement and Execution.** In the case of the failure of the Guarantor to pay, comply with and perform the Guaranteed Obligations when directed by DEP, or of the insolvency or failure in business of the Guarantor, or in the event that a petition in bankruptcy or for a receiver is filed in any court by or against the Guarantor, then any sum or sums hereinbefore referred to shall be deemed for the purposes of the Guaranty to be immediately due and payable and the liability of the Guarantor shall accrue, all without demand or notice. Whenever under the terms hereof, the liability of the Guarantor shall accrue, all without demand or notice. Whenever under the terms hereof, the liability of the Guarantor shall accrue, and in any state where the same is permitted by law. The Guarantor hereby irrevocably authorizes and empowers any attorney of record, or the Prothonotary or Clerk of any Court in the Commonwealth or elsewhere, to appear for Guarantor at any time or times, in any action brought against Guarantor by DEP with respect to the requirements of this Agreement, with or without declaration filed as of any term, and therein confess or enter judgement against Guarantor for all sums payable by Guarantor to DEP under this Agreement, as evidenced by an affidavit signed by a duly authorized designee for DEP setting forth in such amount then due from Guarantor to DEP, with interest from the date of written demand at 10% per annum, costs and attorney fees. If a copy of this Agreement, verified by an affidavit, shall have been filed in such action, it shall not be necessary to file the original as a warrant of attorney. Guarantor waives the right to any stay of execution and also the right of inquisition on any real estate that may be levied upon to collect the amount due under a judgement obtained by virtue hereof, and does hereby voluntarily condemn the same and hereby waives and releases all relief from any and all appraisal, stay, exemption or homestead laws of any state now in force or hereafter passed, or any right to except to, strike off, open or appeal from the judgement so entered. No single exercise of the foregoing warrant and power to bring any action to confess judgment herein shall be deemed to exhaust the power, but the power shall continue undiminished and may be exercised from time to time as often as DEP or its designee shall elect until all amounts payable to DEP shall have been paid in full. The Guarantor further agrees that execution may issue upon judgement so confessed for the full amount of money and accrued interest that is owing to DEP with costs and collection fee, upon filing information in writing in the court where such judgement shall be entered.

8. **Events Not Affecting Obligations.** Until all of the Guaranteed Obligations are completely fulfilled to the satisfaction of DEP and each and every one of the terms, covenants and conditions of this Agreement are fully performed, the liability of the undersigned Guarantor under this Agreement shall in no way be released or affected:

(a) By any act or circumstance which might, but for this paragraph 8, be deemed a legal or equitable discharge of any guarantor or surety; or

(b) By reason of the dissolution of the undersigned Guarantor; or

(c) By reason of the alteration, extension, modification, release or waiver of any for the terms, covenants and conditions contained in any Bond Agreement; or

(d) By reason of any waiver, extension, modification, forbearance or delay or other act or omission of DEP or its failure to proceed promptly or otherwise with respect to the Guaranteed Obligations or this Agreement; or

(e) By the commencement, existence or completion of any proceeding against the Guarantor or otherwise related to the collection and enforcement of the Guaranteed Obligations; or

(f) By reason of any action taken or omitted or circumstance which might vary the risk or affect the rights or remedies of the undersigned Guarantor with respect to the Guaranteed Obligations or this Agreement. The undersigned Guarantor hereby expressly waives and surrenders any defenses to its liability hereunder based upon any of the foregoing acts, omissions, agreements or waivers of DEP, it being the purpose and intent of this Agreement that the obligations of the undersigned Guarantor are absolute and unconditional.

9. **Guarantor Waiver.** The undersigned Guarantor represents and acknowledges that it has received and read all of the Bond Agreement and that the obligations evidenced by the Bond Agreement are and will be of direct interest, benefit and advantage to the undersigned Guarantor. The undersigned Guarantor consents to all of the terms, covenants and conditions for the Bond Agreement and any other document governing or relating to any for the obligations contained in the Bond Agreement. The undersigned Guarantor hereby irrevocably waives any notice of any compromise, forbearance, indulgence, amendment, modification, extension or renewal of any of the terms, covenants or conditions of the Bond Agreement.

2510-FM-BWM0079A Rev. 3/2006

10. The undersigned Guarantor hereby irrevocably waives any notice of:

(a) DEP's intention to act in reliance hereon or of its reliance hereon;

(b) Any presentment, demand, protest, notice of protest and of dishonor, and all other notices with respect to any of the Guaranteed Obligations; and

(c) The commencement or prosecution of any enforcement proceeding, including any proceeding in any court, against the Guarantor or any other person or entity with respect to any of the Guaranteed Obligations.

11. **Severability.** This Agreement shall be a continuing, absolute and unconditional guarantee regardless of the validity, regularity, enforceability or legality of:

(a) Any of the Guaranteed Obligations;

(b) Any term of any document evidencing or relating to any of the Guaranteed Obligations contained in the Bond Agreement. In the event that for any reason one or more of the provisions of this Agreement or their application to any person or circumstance shall be held to be invalid, illegal or unenforceable in any respect or to any extent, such provisions shall nevertheless remain valid, legal and enforceable in all such other respects and to such extent as may be permissible, and such invalidity, illegality or unenforceability shall not affect any other provision hereof.

12. **Notices.** Any notice, demand or request hereunder shall be in writing and shall be deemed to have been sufficiently given for all purposes when personally presented or sent certified or registered mail, return receipt requested, to such party at its address set forth below. Such notice shall be deemed to be given when received if delivered personally or two (2) days after the date mailed if sent by certified or registered mail. Whenever the giving of notice is required, the giving of such notice may be waived, in writing, by the party entitled to receive such notice.

To the Guarantor:

Sunoco, Inc.  
1735 Market Street  
Philadelphia, PA 19103-7583  
Attn: Treasurer

With a copy to:

Sunoco, Inc.  
1735 Market Street, Ste LL  
Philadelphia, PA 19103-7583  
Attn: General Counsel

To DEP:

PA Department of Environmental Protection  
P. O. Box 8471  
Harrisburg, PA 17105-8471  
Bureau of Waste Management  
Attn: Chief, Hazardous Waste Division

13. **Modification.** No modification of this Agreement shall be effective unless in writing and signed by DEP and the undersigned Guarantor.

14. **Successors and Assigns.** This Agreement shall be binding upon the undersigned Guarantor, its successors and assigns, and shall inure to the benefit of DEP, its successors and assigns.

15. **Governing Law.** This Agreement shall be construed in accordance with and governed in all respects by the laws of the Commonwealth of Pennsylvania.

16. **No Waiver of Sovereign Immunity.** This Agreement shall in no way be construed to act as a waiver of governmental, sovereign or any other applicable immunity accorded the Commonwealth of Pennsylvania, the Department of Environmental Protection and their officers, servants, agents and employees.

17. **Time of the Essence.** All dates and times for the performance of the Guarantor Obligations set forth in this Agreement shall be deemed to be the essence of this Agreement.

2510-FM-BWM0079A Rev. 3/2006

**18. Remedies Cumulative.**

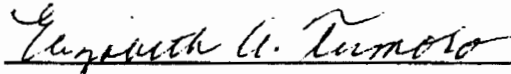
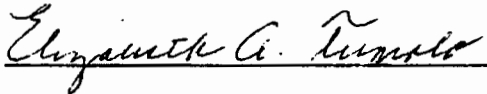
(a) No right or remedy conferred upon or reserved to DEP under this Agreement, or with respect to any guarantee of payment or of performance of any for the Guarantor's obligations under this Agreement, now or hereafter existing at law or in equity or by statute or other legislative enactment, is intended to be or shall be deemed to be exclusive of any other such right or remedy shall be cumulative and concurrent, and shall be in addition to every other such right or remedy, and may be pursued singly, concurrently, successively or otherwise, at the sole discretion of DEP, and shall not be exhausted by any one exercise thereof but may be exercised as often as occasion therefor shall occur. No act of DEP shall be deemed or construed as an election to proceed under any one such right or remedy to the exclusion of any other such right or remedy; furthermore, each right or remedy of DEP shall be separate, distinct and cumulative and none shall be given effect to the exclusion of any other.

(b) The recovery of any judgement by DEP and/or the levy of execution under any judgement shall not affect in any manner or to any extent, the rights, remedies or powers of DEP under this Agreement, but such rights, remedies and powers of DEP shall continue unimpaired as before.

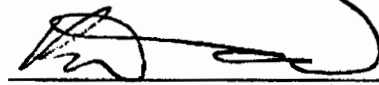
**19. Headings.** The headings of the paragraphs of this Agreement are for descriptive purposes only and are intended to have no legal force or effect.

**Guarantor:**


ATTEST OR WITNESS



By: Brian P. MacDonald  
Senior Vice President and Chief Financial Officer  
(Type/Print Name & Title)

  
(Signature)

By: Charmian Uy, Vice President and Treasurer  
(Type/Print Name & Title)

  
(Signature)

**APPROVED:**  
**COMMONWEALTH OF PENNSYLVANIA**  
**DEPARTMENT OF ENVIRONMENTAL PROTECTION**

By: \_\_\_\_\_  
(Type/Print Name & Title)

\_\_\_\_\_  
(Signature)

Approved for Legality and Form:

\_\_\_\_\_  
Chief/Assistant Counsel  
Department of Environmental Protection

\_\_\_\_\_  
Office of Attorney General

Financial Certification Letter Page 10



## Attachment A

## Guaranty and Surety Ship Agreement

	Name and Address	EPA ID (Permit) Number	Original Permit Date	Total Amount: (closure and/or post closure)
1.	<b>Atlantic Refining &amp; Marketing Corp.</b> (Permittee) Philadelphia Refinery 3144 West Passyunk Avenue Philadelphia, PA 19145 (Point Breeze Processing Area)	PAD002289700	November 2, 1988	\$ 2,900,831
2.	<b>Sunoco, Inc. (R&amp;M)</b> Philadelphia Refinery 3144 West Passyunk Avenue Philadelphia, PA 19145 (Girard Point Processing Area)	PAD049791098	August 31, 1989	\$2,113,223
3.	<b>Sunoco, Inc. (R&amp;M)</b> Marcus Hook Refinery P. O. Box 426 2 <sup>nd</sup> and Green Streets Marcus Hook, PA 19061-0835 (Solid Waste Facility/Container Storage Area)	PAD980550594	July 6, 1990	\$ 134,431
4.	<b>Sunoco, Inc. (R&amp;M)</b> Marcus Hook Refinery P.O. Box 426 2 <sup>nd</sup> and Green Streets Marcus Hook, PA 19061-0835 (Middle Creek Conveyance System)	PAD980550594	July 6, 1990	\$11,862,340
5.	<b>Sunoco, Inc. (R&amp;M)</b> Frankford Plant Margaret and Bermuda Streets Philadelphia, PA 19137	PAD002312791	July 29, 1990	\$ 2,702,689
	<b>Total</b>			<b>\$19,713,514</b>

**Brian P. MacDonald**  
Senior Vice President and  
Chief Financial Officer



March 25, 2010

**Sunoco, Inc.**  
1735 Market Street Ste LL  
Philadelphia PA 19103-7583  
215 977 6665  
Fax 215 977 3131  
bpmacdonald@sunocoinc.com

Pennsylvania Department of Environmental Protection  
Bureau of Waste Management  
Division of Hazardous Waste Management  
RCSOB – 14<sup>th</sup> Floor  
400 Market Street  
P. O. Box 8471  
Harrisburg, PA 17105-8471  
Attn: Financial Test

Dear Sirs:

I am the Chief Financial Officer of Sunoco, Inc., 1735 Market Street, Philadelphia, Pennsylvania 19103-7583. This letter is in support of this firm's use of the financial test to demonstrate financial assurance for closure and/or post-closure costs, as specified in subpart H of 40 CFR parts 264 and 265.

1. This firm is the owner or operator of the following facilities for which financial assurance for closure or post-closure care is demonstrated through the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure and/or post-closure cost estimates covered by the test are shown for each facility:

Barnsdall Zinc Company  
Tri-State Mining District (KS and MO)

EPA #KSD980741862

Current cost Estimate – Closure

\$1,560,000

2. This firm guarantees, through the guarantee specified in subpart H of 40 CFR parts 264 and 265, the closure or post-closure care of the following facilities owned or operated by guaranteed party. The current cost estimates for the closure or post-closure care so guaranteed are shown for each facility:

Sunoco, Inc. (R&M); Brine Service Company, Inc.  
Superfund Site, Corpus Christi, Texas

EPA # TX0000605264

Current Cost Estimate – Closure

\$ 250,000

The firm identified above is the direct or higher-tier parent corporation of the owner or operator.

3. In States where EPA is not administering the financial requirements of subpart H of 40 CFR part 264 or 265, this firm, as owner or operator or guarantor, is demonstrating financial assurance for the closure or post-closure care of the following facilities through the use of a test equivalent or substantially equivalent to the financial test specified in subpart H of 40 CFR parts 264 and 265. The current closure and/or post-closure cost estimates covered by such a test are shown for each facility:

Sunoco, Inc. (R&M) - Marcus Hook Refinery, Marcus Hook, PA  
Middle Creek Conveyance System

EPA #PAD980550594  
Current Cost Estimate - Post-closure \$11,862,340

Sunoco, Inc. (R&M) - Marcus Hook Refinery, Marcus Hook, PA  
Solid Waste Facility

EPA #PAD980550594  
Current Cost Estimate - Closure \$ 134,431

Sunoco, Inc. (R&M) - Philadelphia Refinery,  
Girard Point Processing Area  
Philadelphia, PA

EPA #PAD049791098  
Current Cost Estimate - Closure \$ 2,113,223

Atlantic Refining & Marketing Corp. (Owner)/  
Sunoco, Inc. (R&M) (Operator) - Philadelphia Refinery  
Point Breeze Processing Area, Philadelphia, PA

EPA #PAD002289700  
Current Cost Estimate - Closure \$ 190,971  
Current Cost Estimate - Post-closure \$ 2,709,860

Sunoco, Inc. (R&M)  
Frankford Plant, Philadelphia, PA

EPA #PAD002312791  
Current Cost Estimate - Closure \$ 2,702,689

Sunoco, Inc. (R&M) (Owner)/Sunoco Chemicals, Inc.  
(Operator) - Haverhill Plant, Haverhill, OH

EPA # OHD005108477  
Current Cost Estimate - Closure \$ 2,244,086

Sunoco, Inc. (R&M) – Eagle Point Refinery  
Westville, Gloucester County, NJ

ISRA # E84158, E20030519, E20030520, E20030521

EPA #NJD990753162

NJ #55004

Current Cost Estimate – Remediation \$ 8,916,000

Sunoco, Inc. (R&M) – Eagle Point Refinery/Landfarm  
Westville, Gloucester County, NJ

EPA #NJD990753162

Current Cost Estimate – Closure \$ 592,244

Current Cost Estimate – Post-Closure \$ 722,850

4. This firm is the owner or operator of the following hazardous waste management facilities for which financial assurance for closure or, if a disposal facility, post-closure care, is not demonstrated either to EPA or a State through the financial test or any other financial assurance mechanisms specified in subpart H of 40 CFR parts 264 and 265 or equivalent or substantially equivalent State mechanisms. The current closure and/or post-closure cost estimates not covered by such financial assurance are shown for each facility:

None.

5. This firm is the owner or operator of the following UIC facilities for which financial assurance for plugging and abandonment is required under part 144. The current closure cost estimates as required by 40 CFR 144.62 are shown for each facility:

None.

This firm is required to file a Form 10-K with the Securities and Exchange Commission (SEC) for the latest fiscal year.

The fiscal year of this firm ends on December 31. The figures for the following items marked with an asterisk are derived from this firm's independently audited, year-end financial statements for the latest completed fiscal year, ended December 31, 2009.

ALTERNATIVE II

- |     |   |                          |
|-----|---|--------------------------|
| 1.  | Sum of current closure and post-closure cost estimates (total of all cost estimates shown in the five paragraphs above).  | \$33,998,694             |
| 2.  | Current bond rating of most recent issuance of this firm and name of rating service.  | BBB-<br>Standard & Poors |
| 3.  | Date of issuance of bond.   | March 31, 2009           |
| 4.  | Date of maturity of bond.   | April 15, 2015           |
| *5. | Tangible net worth (if any portion of the closure and post-closure cost estimates is included in "total liabilities" on your firm's financial statements, you may add the amount of that portion to this line). | \$2,842 million          |
| *6. | Total assets in U.S. (required only if less than 90% of firm's assets are located in the U.S.).   | N/A                      |
| 7.  | Is line 5 at least \$10 million?  | Yes                      |
| 8.  | Is line 5 at least 6 times line 1?  | Yes                      |
| *9. | Are at least 90% of firm's assets located in the U.S.? If not, complete line 10.  | Yes                      |
| 10. | Is line 6 at least 6 times line 1?  | N/A                      |

I hereby certify that the wording of this letter is identical to the wording specified in 40 CFR 264.151(f) as such regulations were constituted on the date shown immediately below.

Sunoco, Inc.

By: 

Brian P. MacDonald

Senior Vice President and Chief Financial Officer

Dated: March 25, 2010

CFOPABONDDEP2010



Ernst & Young LLP  
Two Commerce Square  
Suite 4000  
2001 Market Street  
Philadelphia, Pennsylvania 19103-7096  
Tel: 215 448 5000  
Fax: 215 448 4069  
www.ey.com

## Report of Independent Registered Public Accounting Firm On Applying Agreed-Upon Procedures

Sunoco, Inc.  
1735 Market Street  
Philadelphia, Pennsylvania 19103-7583

Attention: Mr. Brian MacDonald  
Senior Vice President and Chief Financial Officer

We have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheet of Sunoco, Inc. and subsidiaries (the "Company") as of December 31, 2009, and the related consolidated statements of operations and cash flows for the year ended December 31, 2009 (collectively, the "Consolidated Financial Statements"), and have issued our report thereon dated February 24, 2010.

We have performed the procedures enumerated below relating to your March 25, 2010 letter pertaining to financial assurance for closure and post-closure care for facility numbers PAD 980550594, PAD 002289700, PAD 049791098, and PAD 002312791 addressed to the Pennsylvania Department of Environmental Protection, Bureau of Land Recycling and Waste Management, Division of Hazardous Waste Management (the "PADEP"), which were agreed to by the Company and the PADEP, solely to assist the Company in evaluating the financial data that the letter specifies as having been derived from the Company's financial statements. Sunoco, Inc. is responsible for the specified financial data included within the letter. This engagement to apply agreed-upon procedures was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of the parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which the report has been requested or for any other purpose.

1. We obtained a schedule prepared by the Company from its accounting records calculating Tangible Net Worth, as defined, as of December 31, 2009. Tangible Net Worth has been defined as the tangible assets that remain after deducting total liabilities. We a) compared the amounts for total assets and total liabilities in the schedule to the corresponding amounts included in or derived from the Consolidated Financial Statements and found them to be in agreement; b) compared the amounts for intangible assets in the schedule to the corresponding amounts appearing in the accounting records and found them to be in agreement; and c) mathematically recomputed the calculation reflected on the schedule of total tangible assets less total liabilities and found such recalculated total to be in agreement with the Tangible Net Worth shown on the schedule. We compared the Tangible Net Worth in the schedule to the corresponding amount presented in your March 25, 2010 letter listed under caption Alternative II, Line 5, and found them to be in agreement.



2. We obtained a schedule of the Company's calculation of total assets in the United States to total consolidated assets included in the Consolidated Financial Statements, which indicates greater than 90% of the Company's total consolidated assets are in the United States. We compared the amount on the schedule for the total consolidated assets to the corresponding amount included in the Consolidated Financial Statements and found them to be in agreement. We compared the amount on the schedule for total assets in the United States to the corresponding amount in the Company's accounting records and found them to be in agreement. We mathematically recomputed the calculation reflected on the schedule of total assets in the United States divided by the total consolidated assets and found such recalculated percentage to be in agreement.

We were not engaged to and did not perform an audit, the objective of which would be the expression of an opinion on the specified financial data reflected in Alternative II. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the management of the Company and the PADEP, and is not intended to be and should not be used by anyone other than these specified parties.

*Ernst & Young LLP*

March 25, 2010



**Sunoco, Inc.**  
**2009 Annual Report**  
**and Form 10-K**

